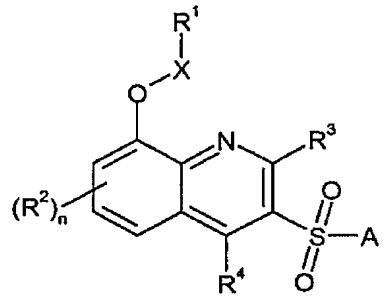
Claims

1. A compound of formula (I) or a pharmaceutically acceptable salt thereof:



(I)

wherein:

R^1 represents a group of formula $-NR^aR^b$ or a nitrogen containing heterocyclyl group optionally substituted by one or more (eg. 1 to 4) C_{1-6} alkyl groups;

X represents a bond, $-(CR^cR^d)-$, $-(CR^cR^d)-(CR^eR^f)-$, $-(CR^cR^d)-(CR^eR^f)-(CR^gR^h)-$, or –heterocyclyl-, wherein said heterocyclyl group may be optionally substituted by one or more (eg. 1 to 4) C_{1-6} alkyl groups; such that when R^1 represents $-NR^aR^b$, X does not represent a bond nor $-(CR^cR^d)-$;

R^a, R^b, R^c, R^d, R^e, R^f, R^g and R^h independently represent hydrogen or C_{1-6} alkyl;

R^2 represents halogen, cyano, $-CF_3$, $-CF_3O$, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkanoyl or a group $-CONR^5R^6$;

n represents 0 to 3;

R^3 and R^4 independently represent hydrogen, halogen, cyano, $-CF_3$, $-CF_3O$, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkanoyl or a group $-CONR^5R^6$;

R^5 and R^6 independently represent hydrogen or C_{1-6} alkyl or together with the N atom to which they are attached may be fused to form a 5- to 7- membered N-containing aromatic or non-aromatic heterocyclic ring optionally interrupted by an O or S atom;

A represents an –aryl, -heteroaryl, -aryl-aryl, -aryl-heteroaryl, -heteroaryl-aryl or –heteroaryl-heteroaryl group;

wherein said aryl and heteroaryl groups of A may be optionally substituted by one or more (eg. 1, 2 or 3) substituents which may be the same or different, and which are selected from the group consisting of halogen, hydroxy, cyano, nitro, trifluoromethyl, trifluoromethoxy, C_{1-6} alkyl, trifluoromethanesulfonyloxy, pentafluoroethyl, C_{1-6} alkoxy, arylC_{1-6} alkoxy, C_{1-6} alkylthio, C_{1-6} alkoxyC_{1-6} alkyl, C_{3-7} cycloalkylC_{1-6} alkoxy, C_{1-6} alkanoyl, C_{1-6} alkoxycarbonyl, C_{1-6} alkylsulfonyl, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyloxy, C_{1-6} alkylsulfonylC_{1-6} alkyl, arylsulfonyl, arylsulfonyloxy, arylsulfonylC_{1-6} alkyl, C_{1-6} alkylsulfonamido, C_{1-6} alkylamido, C_{1-6} alkylsulfonamidoC_{1-6} alkyl, C_{1-6} alkylamidoC_{1-6} alkyl, arylsulfonamido, arylcarboxamido, arylsulfonamidoC_{1-6} alkyl, arylcarboxamidoC_{1-6} alkyl, aroyl, aroylC_{1-6} alkyl, arylC_{1-6} alkanoyl, or a group $CONR^7R^8$ or $SO_2NR^7R^8$, wherein R^7 and R^8 independently represent hydrogen or C_{1-6} alkyl or R^7 and R^8 together with the

nitrogen atom to which they are attached may form a nitrogen containing heterocyclyl or heteroaryl group;
or solvates thereof.

2. A compound of formula (I) as defined in claim 1, wherein A represents aryl optionally substituted by one or more halogen atoms or heteroaryl.

3. A compound of formula (I) as defined in claim 1 or claim 2, wherein R^1 represents NR^aR^b, wherein R^a and R^b are independently hydrogen or methyl; or a nitrogen containing heterocyclyl group selected from pyrrolidinyl, piperidinyl, morpholinyl, azabicyclo[2.2.2]oct-3-yl or azepinyl optionally substituted by methyl or isopropyl.

4. A compound of formula (I) as defined in claim 1 selected from:
[2-(3-Phenylsulfonylquinoline-8-yloxy)ethyl]dimethylamine;
8-({[(2*S*)-1-Methyl-2-pyrrolidinyl]methyl}oxy)-3-(phenylsulfonyl) quinoline;
3-(Phenylsulfonyl)-8-{[(2*S*)-2-pyrrolidinylmethyl]oxy}quinoline;
3-(Phenylsulfonyl)-8-{[2-(1-pyrrolidinyl)ethyl]oxy}quinoline;
3-(Phenylsulfonyl)-8-[(3*R*)-3-pyrrolidinyloxy]quinoline;
Dimethyl(1-methyl-2-{[3-(phenylsulfonyl)-8-quinolinyl]oxy} propyl)amine;
3-(Phenylsulfonyl)-8-{[(2*R*)-2-pyrrolidinylmethyl]oxy}quinoline;
3-(Phenylsulfonyl)-8-{[2-(1-piperidinyl)ethyl]oxy}quinoline;
8-{[2-(4-Morpholinyl)ethyl]oxy}-3-(phenylsulfonyl)quinoline;
8-(1-Azabicyclo[2.2.2]oct-3-yloxy)-3-(phenylsulfonyl)quinoline;
3-(Phenylsulfonyl)-8-{[3-(1-piperidinyl)propyl]oxy}quinoline;
8-{[2-(Hexahydro-1H-azepin-1-yl)ethyl]oxy}-3-(phenylsulfonyl)quinoline;
((3S,4R)-4-{[3-(Phenylsulfonyl)-8-quinolinyl]oxy}tetrahydro-3-furanyl)amine;
(3S,4R)-N,N-Dimethyl-4-{[3-(phenylsulfonyl)-8-quinolinyl]oxy}tetrahydro-3-furanamine;
3-(Phenylsulfonyl)-8-(3-piperidinyloxy)quinoline;
3-(Phenylsulfonyl)-8-(4-piperidinyloxy)quinoline;
8-{[(3R)-1-Methyl-3-pyrrolidinyl]oxy}-3-(phenylsulfonyl)quinoline;
8-{[(3S)-1-Methyl-3-pyrrolidinyl]oxy}-3-(phenylsulfonyl)quinoline;
8-[(3R)-1-Azabicyclo[2.2.2]oct-3-yloxy]-3-(phenylsulfonyl)quinoline;
3-(Phenylsulfonyl)-8-[(3S)-3-pyrrolidinyloxy]quinoline;
8-[(1-Methyl-4-piperidinyl)oxy]-3-(phenylsulfonyl)quinoline;
8-[(1-Azabicyclo[2.2.2]oct-2-ylmethyl)oxy]-3-(phenylsulfonyl)quinoline;
8-[(1-Methyl-3-piperidinyl)oxy]-3-(phenylsulfonyl)quinoline;
8-[(3-Morpholinylmethyl)oxy]-3-(phenylsulfonyl)quinoline;
8-({[(2S)-1-(1-Methylethyl)-2-pyrrolidinyl]methyl}oxy)-3-(phenylsulfonyl)quinoline;
N,N-Dimethyl-2-{[3-(phenylsulfonyl)-8-quinolinyl]oxy}-1-propanamine; or
5-Chloro-3-(phenylsulfonyl)-8-{[2-(1-pyrrolidinyl)ethyl]oxy}quinoline;
or a pharmaceutically acceptable salt thereof.

5. A compound of claim 4 wherein the salt is the hydrochloride salt.

6. A pharmaceutical composition which comprises a compound or a pharmaceutically acceptable salt as defined in any one of claims 1 to 5 and a pharmaceutically acceptable carrier or excipient.

7. A compound or pharmaceutically acceptable salt as defined in any one of claims 1 to 5 for use in the treatment of depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke.

8. The use of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 5 in the manufacture of a medicament for the treatment or prophylaxis of depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke.

9. A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 5 for use in the treatment of depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke.

10. A method of treating depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke which comprises administering a safe and therapeutically effective amount to a patient in need thereof of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 5.